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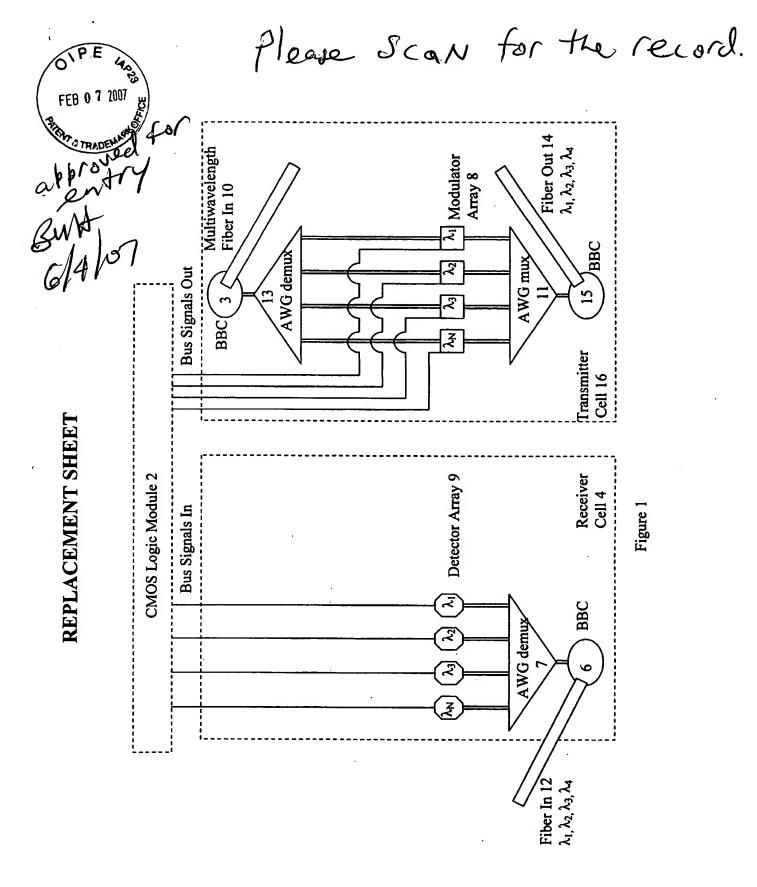
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APPLICATION NO.	FILINO	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,561	. 01/14/2004		Alexander G. Dickinson	LUX-P017	5977
Luxtera, Inc.	7590	06/27/2007	EXAMINER		
1819 Aston Av		HEALY, BRIAN			
Carlsbad, CA 92008				. ART UNIT	PAPER NUMBER
				2883	
		·		MAIL DATE	DELIVERY MODE
				06/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Supplemental	Application No.	Applicant(s)				
Notice of Allowability	10/758,561	DICKINSON ET AL.				
, Notice of Allowability	Examiner	Art Unit				
	Brian M. Healy	2883				
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS				
1. This communication is responsive to the decision on the per	etition mailed 5/22/2007.					
2. The allowed claim(s) is/are 1-41 and 104-144.						
3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this national stage application from the						
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements				
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give						
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.						
(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached						
1) hereto or 2) to Paper No./Mail Date						
(b) including changes required by the attached Examiner' Paper No./Mail Date	s Amendment / Comment or in the C	Office action of				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t						
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 🗆 Notice of Informal P	Patent Application				
2. Notice of Praftperson's Patent Drawing Review (PTO-948)	 5. ☐ Notice of Informal Patent Application 6. ☐ Interview Summary (PTO-413), 					
2. In Hotice of Draffperson's Fatent Drawing Neview (1 10-040)	Paper No./Mail Date					
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	7. Examiner's Amendr	·				
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	-	ent of Reasons for Allowance				
	(a) . ☐ Other	·				
	lead	Brian M. Healy				
	\mathcal{O}	Primary Examiner				
BRIAN HEALY Art Unit: 2883 PRIMARY PATENT EXAMINER						



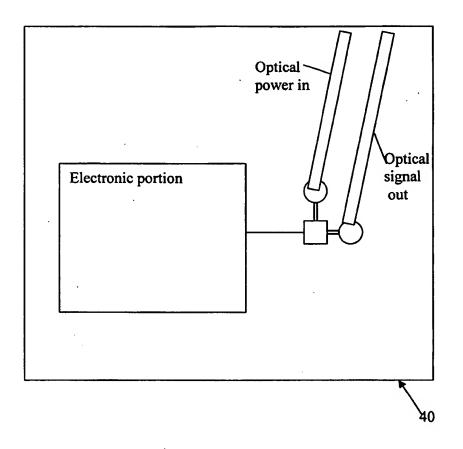


Figure 2a

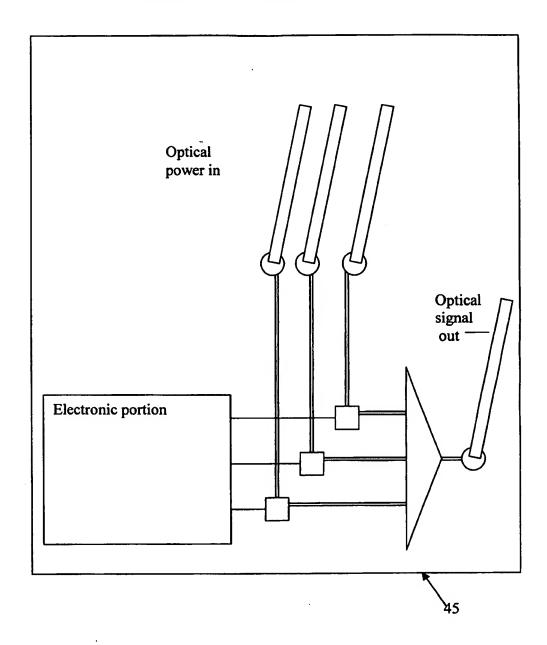


Figure 2b

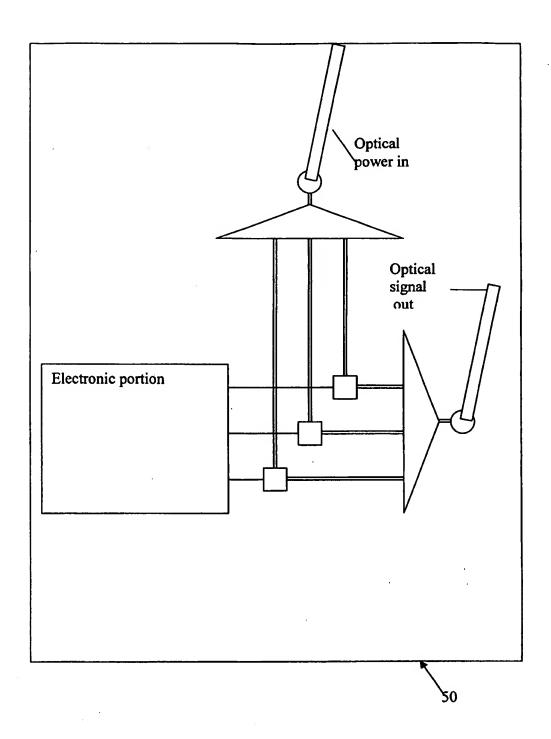


Figure 2c

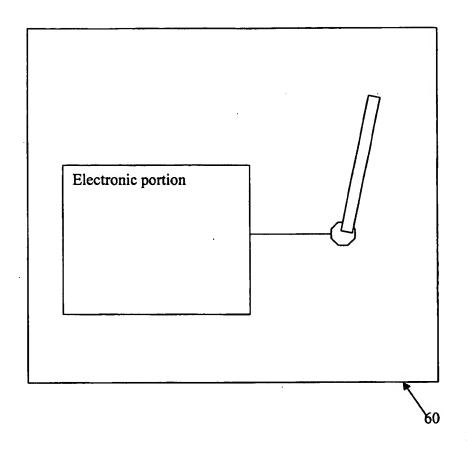


Figure 2d

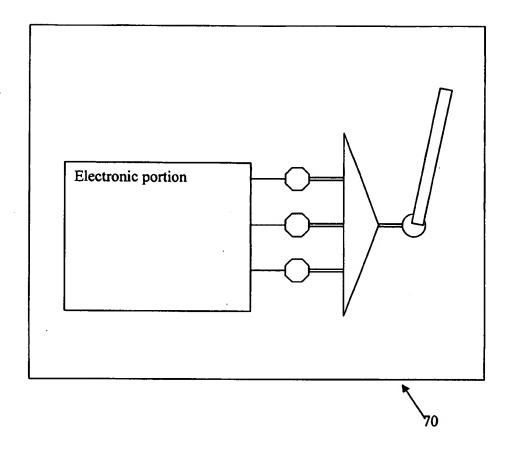


Figure 2e

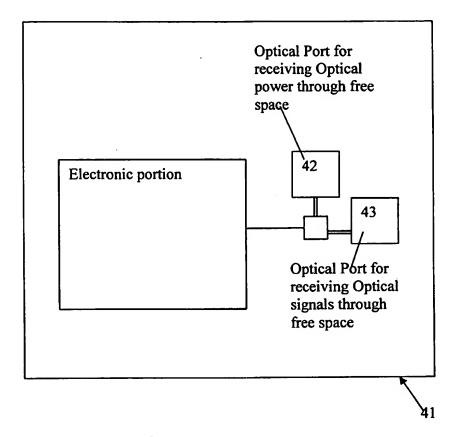


Figure 2f

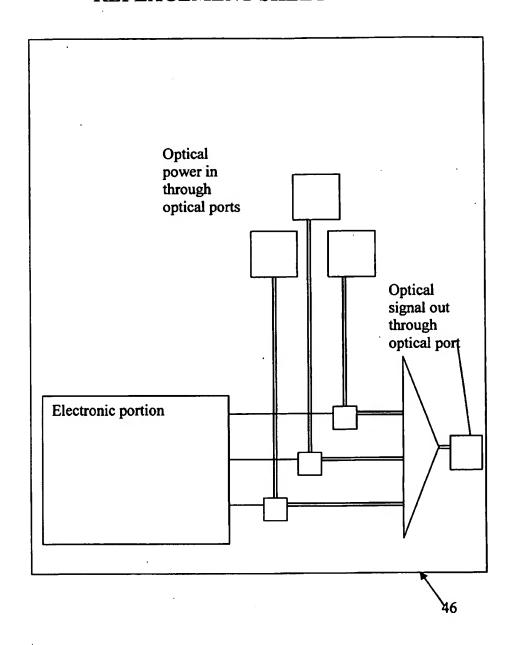


Figure 2g

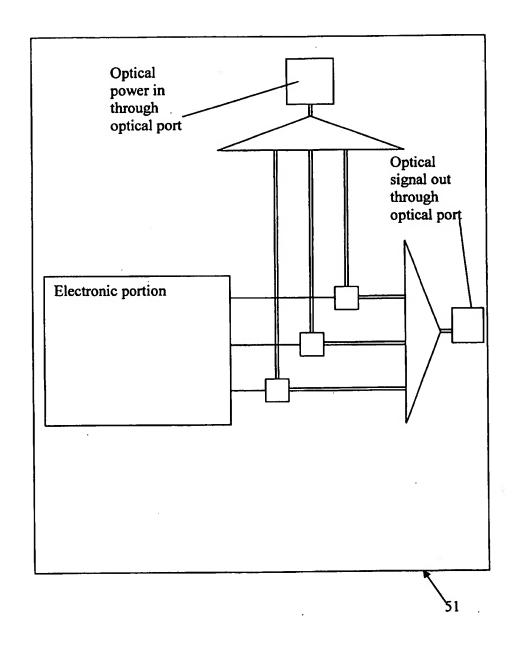


Figure 2h

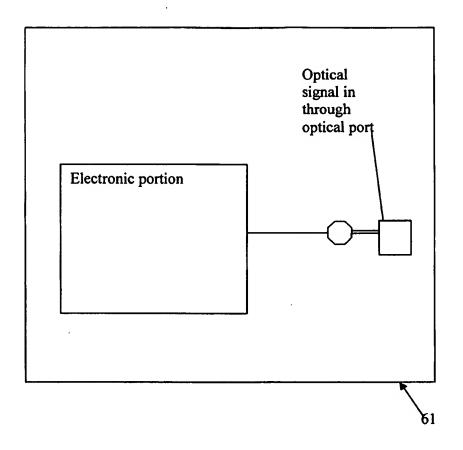


Figure 2i

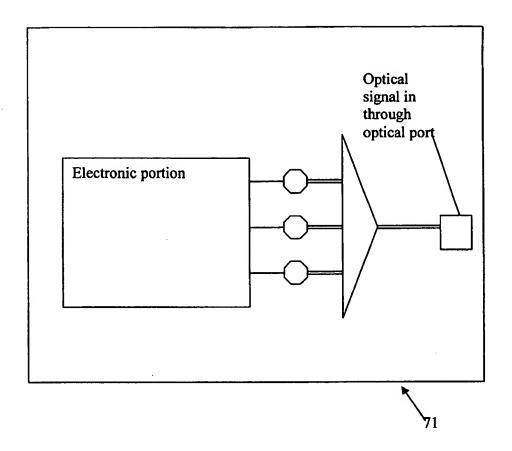


Figure 2j

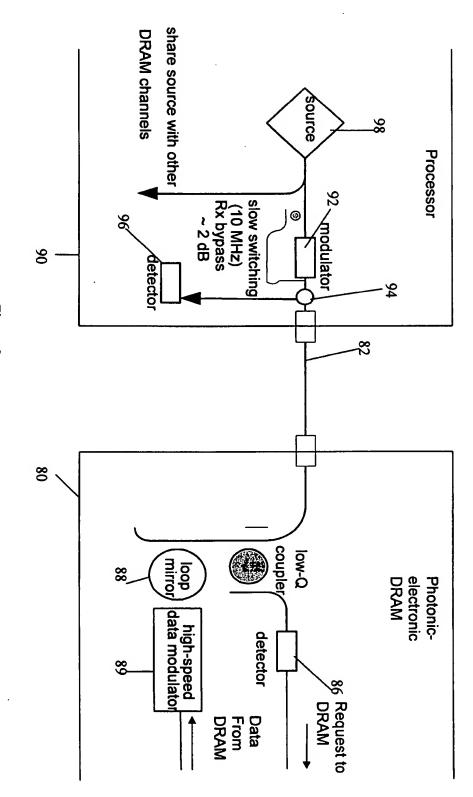
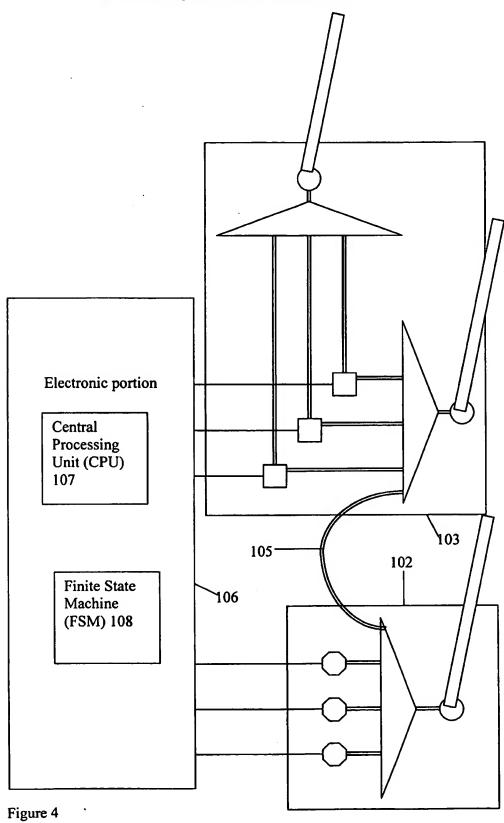


Figure 3



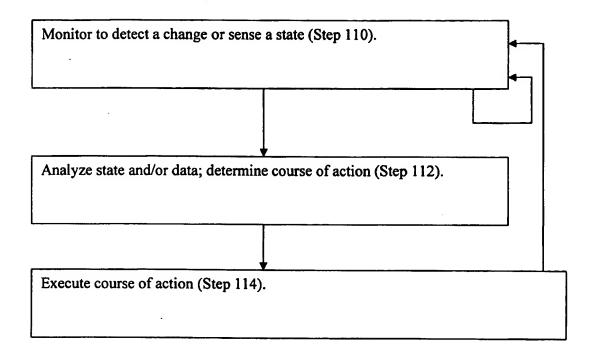


Figure 5

Optical signals representing one or more packets are received by the integrated electronic-photonic circuit (Step 120). Optical signals received on a passthrough wavelength for passthrough on the same wavelength are sent to a multiplexer for multiplexing and then on to an optical output port (Step 122). Optical signals received on a passthrough wavelength for passthrough to a different wavelength are sent to detectors, translated into electronic signals, sent to a modulator operating on the appropriate export wavelength, translated into optical signals, sent to a multiplexer for multiplexing and then on to an optical output port (Step 124). All other signals are submitted to the FSM where the packets and/or packet headers are examined (Step 126). Based on the packet properties, packet header content and/or state variables, the packets may be routed to an on-chip destination or re-routed and injected

into an optical network through the photonic interface and/or injected into an

electronic network through an optional electronic interface (Step 128).

Figure 6

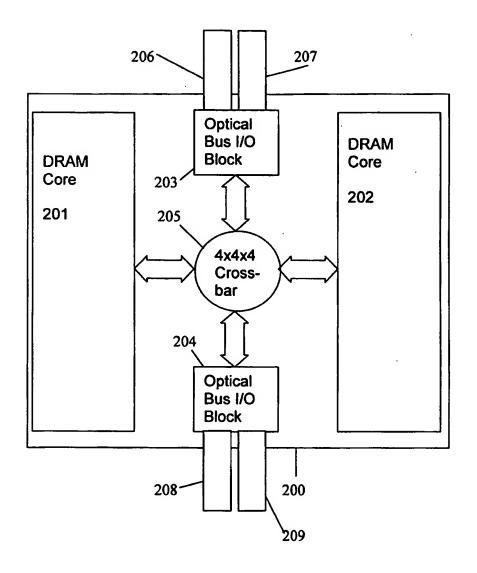


Figure 7

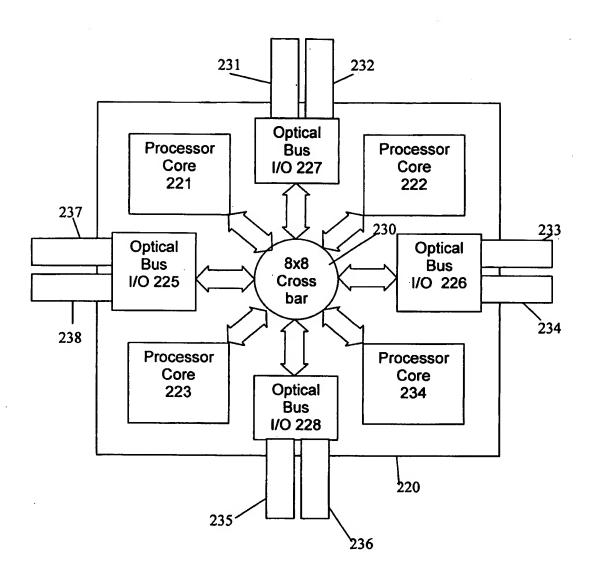
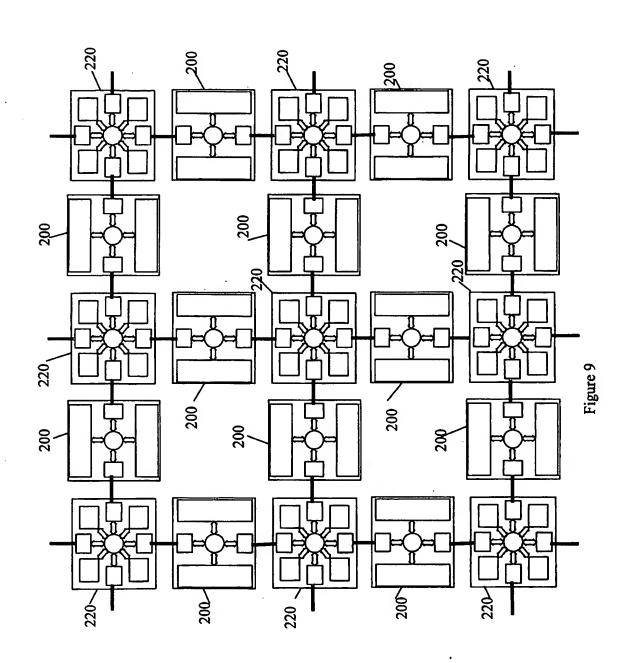
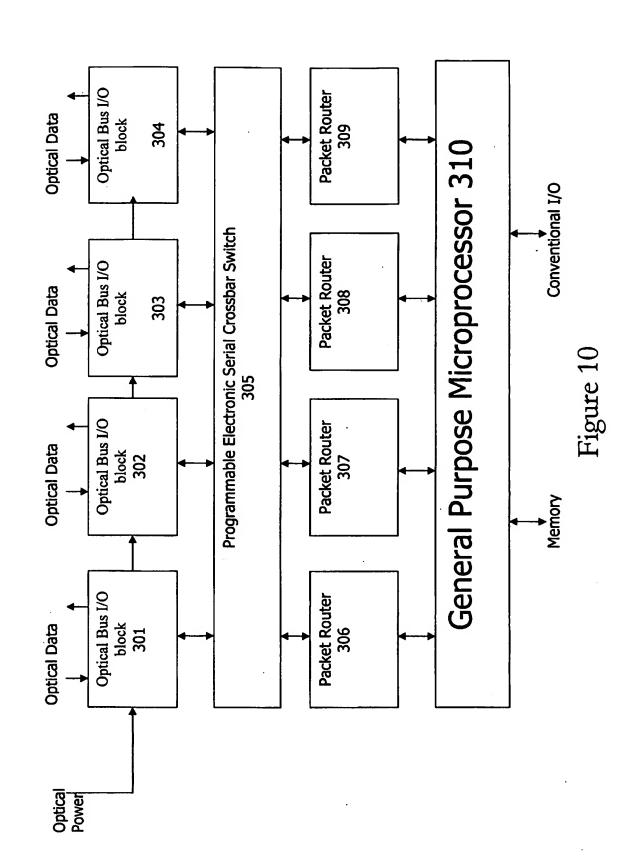


Figure 8





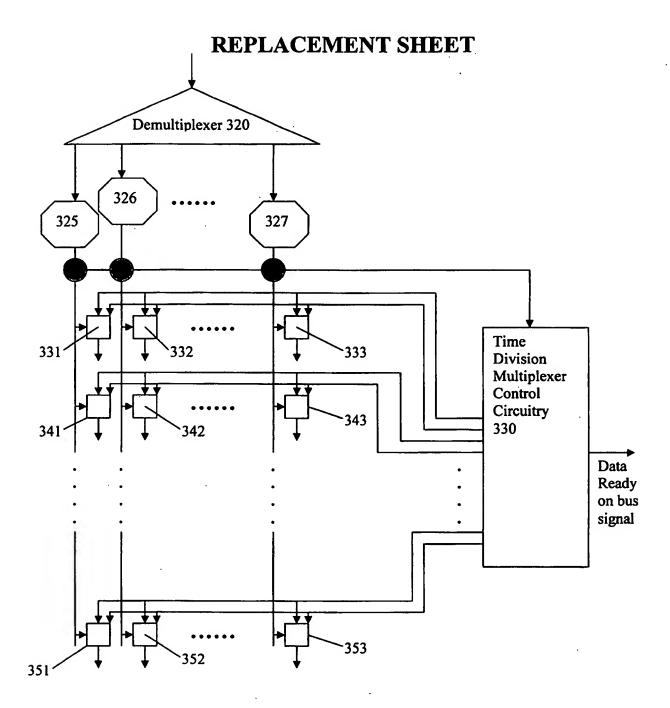


Figure 11a

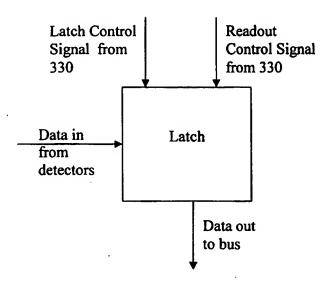


Figure 11b

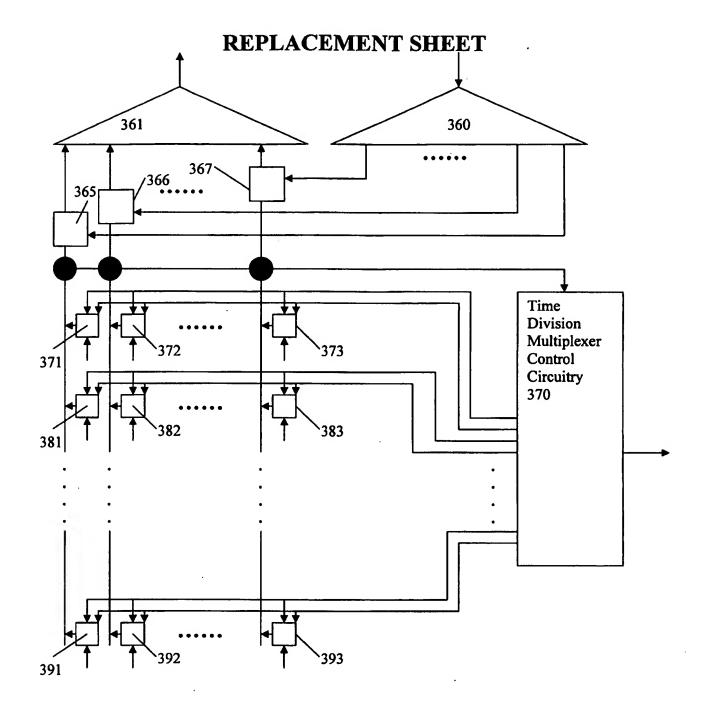


Figure 12a

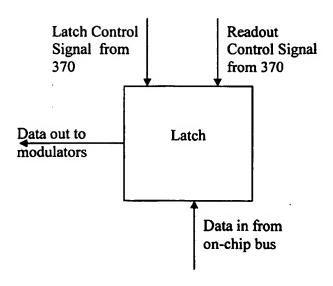


Figure 12b

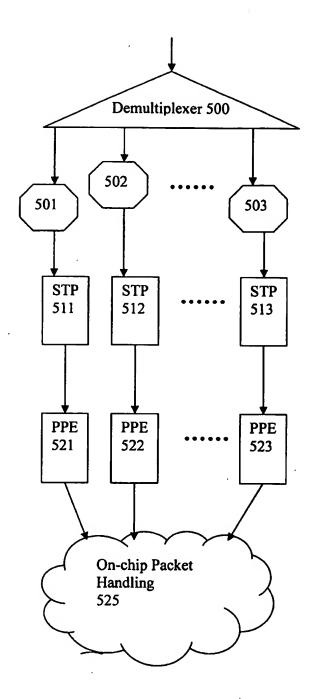


Figure 13

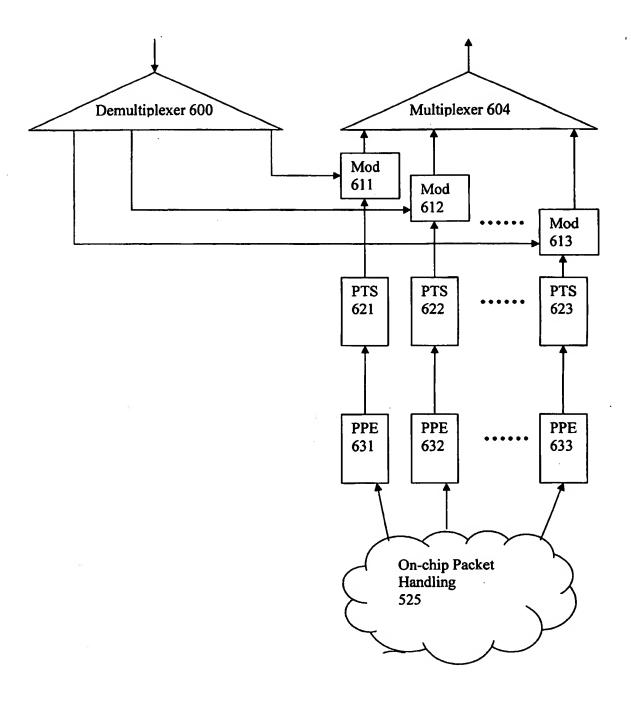


Figure 14

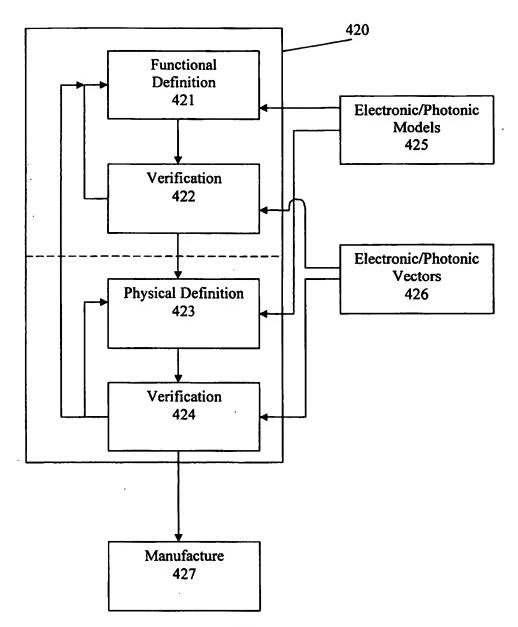


Figure 15